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EXAMINER

DAVENPORT, MON CHERI S

ART UNIT	PAPER NUMBER
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2616

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/687,621

Applicant(s)

HORI ET AL.

Examiner

Mon Cheri S. Davenport

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-21** rejected under 35 U.S.C. 103(a) as being unpatentable over Shirota (US Patent Number 6,591,150) in view of Bishop et al. (US Patent 5,570,343).

Regarding **Claim 1** Shirota discloses a duplex system (**mobile communication system**) having a first wireless LAN base station and a second wireless LAN base station,

wherein each of the first wireless LAN base station and the second wireless LAN base station comprises (*see Figure 3, section 32(1)-32(n), base station controllers, see col. 9, lines 25-30*):

a fault detecting section(**OMCR**) for detecting a fault of a local wireless LAN base station in which it resides and generating a fault detection signal(*exchange monitoring information*)(*see figure 3, section 31, OMCR(Operation and Maintenance Center Radio), see col. 9, lines 31-41, remotely collect state information of each base station, and exchange the monitoring information*));

a duplex control section (**OMCR**) for storing an address of a duplex party of the wireless LAN base station (*see col.9, lines 39-44, TCP connection established and each station has a individual IP address*), sending and receiving a control signal to and from the duplex party, and

controlling each of sections according to the control signal (*see col. 9, lines 48-50, each BSC manage the state thereof and the state of each base station transceiver*);

a power control section (*see figure 4, section 413, control execution manager*) for placing the local wireless LAN base station in an active state or a standby state according to a command received from the duplex control section (*see col. 10, lines 14-19, control execution manager has the function to control the part of the BSC and carried out the instruction of the OMCR (active or standby state), control instructions reads on command, and managing control states of the BSC, with control instructions*) ; and

a setting control section (*see figure 3, section 53, monitoring control processor*) for storing setting of the local wireless LAN base station and sending and receiving the setting of the local wireless LAN base station according to a command received from the duplex control section (*see col. 10, lines 34-39, stores information collected by the monitoring control apparatus, and transfers information to and from a maintenance operator*)

wherein when the first wireless LAN base station which is in the active state detects a fault, the first wireless LAN base station is configured to send an activation request to the second wireless LAN base station which is in the standby state (*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*)

wherein when the first wireless LAN base station confirms that the second wireless LAN base station has been placed in the active state, the first wireless LAN base station is configured to send setting thereof to the second wireless LAN base station, and (*see col. 11, lines 40-58,*

TCP connection is established, with the second BSC, then transmits a control information read request to each of the BSCs, the second BSC controller then reads the control previously carried out by the first BSC)

wherein when the first wireless LAN base station confirms that the setting of the second wireless LAN base station is the same as the setting of the first wireless LAN base station, the first wireless LAN base station is configured to be placed in the standby state (*see col. 11-12, lines 59-4, the control information notified from the first BSC to the second BSC, the second BSC continues the job of the first BSC, then notifies the end to the first BSC*).

However Shirota fails to specifically disclose that a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides as claimed.

Bishop et al teaches a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides (see figure 5, section 122, see col. 4 lines 15-3, and lines 33-35, FIG. 5 illustrates a hardware configuration of a detection circuit suitable for indicating a failure of either an entire base station or an RCU inside a base station)

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have the fault detecting section within the base station because it would be more cost effective as an engineering design choice.

Regarding **Claim 2** Shirota disclose a duplex system (**mobile communication system**) having a first wireless LAN base station, a second wireless LAN base station, and a management

server (*section 31, OMCR*)(*see Figure 3, section 32(1)-32(n), base station controllers, see col. 9, lines 25-30*):

wherein each of the first wireless LAN base station and the second wireless LAN base station comprises:

a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides and generating a fault detection signal (*exchange monitoring information*)(*see figure 3, section 31, OMCR(Operation and Maintenance Center Radio), see col. 9, lines 31-41, remotely collect state information of each base station, and exchange the monitoring information*));

a duplex control section for storing an address of the management server (*see col.9, lines 39-44, TCP connection established and each station has a individual IP address*), sending and receiving a control signal to and from the management server, and controlling each of sections according to the control signal (*see col. 9, lines 48-53, each BSC manage the state thereof and the state of each base station transceiver, the BSC has the function of notifying such state information to the OMCR*);

a power control section for placing the local wireless LAN base station in an active state or a standby state according to a command received from the duplex control section (*see col. 10, lines 14-19, control execution manager has the function to control the part of the BSC and carried out the instruction of the OMCR (active or standby state) control instructions reads on command, and managing control states of the BSC, with control instructions*)); and

a setting control section (*see figure 3, section 53, monitoring control processor*) for storing setting of the local wireless LAN base station and sending and receiving the setting according to a command received from the duplex control section (*see col. 10, lines 34-39, stores information collected by the monitoring control apparatus, and transfers information to and from a maintenance operator*),

wherein the management server comprises (*see figure 3, section 53, monitoring control processor*):

a server side duplex control section (*see figure 3, section 53, monitoring control processor*) for storing each address of the first wireless LAN base station and the second wireless LAN base station, sending and receiving a control signal to and from each of the first wireless LAN base station and the second wireless LAN base station, and controlling each of sections according to the control signal (*see col. 10, lines 34-39, stores information collected by the monitoring control apparatus, and transfers information to and from a maintenance operator, to control BSCs*),

wherein when the first wireless LAN base station which is in the active state detects a fault thereof, the first wireless LAN base station is configured to send a fault detection notice to the management server and the management server is configured to send an activation request to the second wireless LAN base station which is in the standby state (*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up BSC(OMCR)*)

wherein when the management server confirms that the second wireless LAN base station has been placed in the active state, the management server is configured to send a setting data request to the first wireless LAN base station, the first wireless LAN base station is configured to send setting thereof to the management server, and the management server is configured to send the setting of the first wireless LAN base station to the second wireless LAN base station (*see col. 11, lines 40-58, TCP connection is established, with the second BSC, then transmits a control information read request to each of the BSCs, the second BSC controller then reads the control previously carried out by the first BSC*), and

wherein when the management server confirms that the setting of the second wireless LAN base station is the same as the setting of the first wireless LAN base station, the management server is configured to send a standby request to the first wireless LAN base station and the first wireless LAN base station is configured to be placed in the standby state(*see col. 11-12, lines 59-4, the control information notified from the first BSC to the second BSC, the second BSC continues the job of the first BSC, then notifies the end to the first BSC*).

However Shirota fails to specifically disclose that a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides as claimed.

Bishop et al teaches a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides (see figure 5, section 122, see col. 4 lines 15-3, and lines 33-35, FIG. 5 illustrates a hardware configuration of a detection circuit suitable for indicating a failure of either an entire base station or an RCU inside a base station)

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have the fault detecting section within the base station because it would be more cost effective as an engineering design choice.

Regarding **Claim 3** Shirota discloses a duplex system(**mobile communication system**) having a first wireless LAN base station and a second wireless LAN base station,

wherein each of the first wireless LAN base station and the second wireless LAN base station comprises *see Figure 3, section 32(1)-32(n), base station controllers, see col. 9, lines 25-30*):

a fault detecting section (**OMCR**) for detecting a fault of a local wireless LAN base station in which it resides and generating a fault detection signal(*exchange monitoring information*)(*see figure 3, section 31, OMCR(Operation and Maintenance Center Radio), see col. 9, lines 31-41, remotely collect state information of each base station, and exchange the monitoring information*));

a duplex control section(OMCR)for storing an address of a duplex party of the wireless LAN base station(*see col.9, lines 39-44, TCP connection established and each station has a individual IP address*),sending and receiving a control signal to and from the duplex party, and controlling each of sections according to the control signal(*see col. 9, lines 48-50, each BSC manage the state thereof and the state of each base station transceiver*);

a power control section (*see figure 4, section 413,control execution manager*) for placing the local wireless LAN base station in an active state or a standby state according to a

command received from the duplex control section (*see col. 10, lines 14-19, control execution manager has the function to control the part of the BSC and carried out the instruction of the OMCR (active or standby state) control instructions reads on command, and managing control states of the BSC, with control instructions*)); and

a setting control section(*see figure 3, section 53, monitoring control processor*) for storing setting of the local wireless LAN base station and sending and receiving the setting of the local wireless LAN base station according to a command received from the duplex control section (*see col. 10, lines 34-39, stores information collected by the monitoring control apparatus, and transfers information to and from a maintenance operator*),

wherein when the first wireless LAN base station which is in the active state detects changed setting, the first wireless LAN base station is configured to send changed setting data to second wireless LAN base station which is in the standby state(*see figure 7, State collecting process (7-2), see col. 11, lines 11-13, see col. 11, lines 14-16, the OMCR transmits a download control instruction to the BSC*), the second wireless LAN base station is configured to reflect the received changed setting data in setting of the second wireless LAN base station(*see col. 11, lines 40-58, TCP connection is established, with the second BSC, then transmits a control information read request to each of the BSCs, the second BSC controller then reads the control previously carried out by the first BSC*),

wherein when the first wireless LAN base station detects a fault , the first wireless LAN base station is configured to send an activation request to the second wireless LAN base station(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the*

disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR),and

wherein when the first wireless LAN base station confirms that the second wireless LAN base station has been placed in the active state, the first wireless LAN base station is configured to be placed in the standby state(*see col. 11-12, lines 59-4, the control information notified from the first BSC to the second BSC, the second BSC continues the job of the first BSC, then notifies the end to the first BSC).*

However Shirota fails to specifically disclose that a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides as claimed.

Bishop et al teaches a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides (see figure 5, section 122, see col. 4 lines 15-3, and lines 33-35, FIG. 5 illustrates a hardware configuration of a detection circuit suitable for indicating a failure of either an entire base station or an RCU inside a base station)

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have the fault detecting section within the base station because it would be more cost effective as an engineering design choice.

Regarding **Claim 4** Shirota discloses a duplex system (**mobile communication system**) having a first wireless LAN base station, a second wireless LAN base station, and a management server (*section 31, OMCR*)(*see Figure 3, section 32(1)-32(n), base station controllers, see col. 9, lines 25-30*):

wherein each of the first wireless LAN base station and the second wireless LAN base station comprises:

a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides and generating a fault detection signal (*see col. 9, lines 48-50, each BSC manages the state thereof and the state of each Base station transceiver*);

a duplex control section for storing an address of the management server (*see col.9, lines 39-44, TCP connection established and each station has a individual IP address*), sending and receiving a control signal to and from the management server, and controlling each of sections according to the control signal (*see col. 9, lines 48-53, each BSC manage the state thereof and the state of each base station transceiver, the BSC has the function of notifying such state information to the OMCR*);

a power control section for placing the local wireless LAN base station in an active state or a standby state according to a command received from the duplex control section (*see col. 10, lines 14-19, control execution manager has the function to control the part of the BSC and carried out the instruction of the OMCR (active or standby state) control instructions reads on command, and managing control states of the BSC, with control instructions*)); and

a setting control section (*see figure 3, section 53, monitoring control processor*) for storing setting of the local wireless LAN base station and sending and receiving the setting according to a command received from the duplex control section (*see col. 10, lines 34-39, stores information collected by the monitoring control apparatus, and transfers information to and from a maintenance operator*),

wherein the management server comprises(*see figure 3, section 53, monitoring control processor*):

a server side duplex control section (*see figure 3, section 53, monitoring control processor*) for storing each address of the first wireless LAN base station and the second wireless LAN base station, sending and receiving a control signal to and from each of the first wireless LAN base station and the second wireless LAN base station, and controlling each of sections according to the control signal(*see col. 10, lines 34-39, stores information collected by the monitoring control apparatus, and transfers information to and from a maintenance operator, to control BSCs*),

wherein when the first wireless LAN base station which is in the active state detects changed setting, the first wireless LAN base station is configured to send changed setting data to the management server (*see figure 7, State collecting process (7-2), see col. 11, lines 11-13, see col. 11, lines 14-16, the OMCR transmits a download control instruction to the BSC*), the management server is configured to send the changed setting data to the second wireless LAN base station which is in the standby state, and the second wireless LAN base station is configured to reflect the received changed setting data in setting thereof (*see col. 11, lines 40-58, TCP connection is established, with the second BSC, then transmits a control information read request to each of the BSCs, the second BSC controller then reads the control previously carried out by the first BSC*),

wherein when the first wireless LAN base station detects a fault, the first wireless LAN base station is configured to send a fault detection notice to the management server and the

management server is configured to send an activation request to the second wireless LAN base station (*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*), and

wherein when the management server(OMCR) confirms that the second wireless LAN base station has been placed in the active state, the management server is configured to send a standby request to the first wireless LAN base station and the first wireless LAN base station is configured to be placed in the standby state(*see col. 11, lines 40-58, TCP connection is established, with the second BSC(second OMCR), then transmits a control information read request to each of the BSCs, the second BSC controller then reads the control previously carried out by the first BSC*)

However Shirota fails to specifically disclose that a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides as claimed.

Bishop et al teaches a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides (see figure 5, section 122, see col. 4 lines 15-3, and lines 33-35, FIG. 5 illustrates a hardware configuration of a detection circuit suitable for indicating a failure of either an entire base station or an RCU inside a base station)

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have the fault detecting section within the base station because it would be more cost effective as an engineering design choice.

Regarding **Claim 5** Shirota discloses a duplex system (**mobile communication system**) having a first wireless LAN base station, a second wireless LAN base station, and a management server (*section 31, OMCR*) (see *Figure 3, section 32(1)-32(n), base station controllers, see col. 9, lines 25-30*),

wherein each of the first wireless LAN base station and the second wireless LAN base station comprises:

a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides and generating a fault detection signal (*exchange monitoring information*) (see *figure 3, section 31, OMCR (Operation and Maintenance Center Radio), see col. 9, lines 31-41, remotely collect state information of each base station, and exchange the monitoring information*);

a duplex control section (OMCR) for storing an address of the management server (see *col. 9, lines 39-44, TCP connection established and each station has a individual IP address*), sending and receiving a control signal to and from the management server, and controlling each of sections according to the control signal (see *col. 9, lines 48-50, each BSC manage the state thereof and the state of each base station transceiver*);

a power control section (*see figure 4, section 413, control execution manager*) for placing the local wireless LAN base station in an active state or a standby state according to a command received from the duplex control section (see *col. 10, lines 14-19, control execution manager has the function to control the part of the BSC and carried out the instruction of the*

OMCR (active or standby state) control instructions reads on command, and managing control states of the BSC, with control instructions));

a setting control section(*see figure 3, section 53, monitoring control processor*) for storing setting of the local wireless LAN base station and sending and receiving the setting according to a command received from the duplex control section(*see col. 10, lines 34-39, stores information collected by the monitoring control apparatus, and transfers information to and from a maintenance operator*),

wherein the management server comprises:

a server side duplex control section for storing each address of the first wireless LAN base station and the second wireless LAN base station(*see col.9, lines 39-44, TCP connection established and each station has a individual IP address*), sending and receiving a control signal to and from each of the first wireless LAN base station and the second wireless LAN base station, and controlling each of sections according to the control signal*see col. 9, lines 48-53, each BSC manage the state thereof and the state of each base station transceiver, the BSC has the function of notifying such state information to the OMCR*); and

a setting storing section for storing changed setting data of a wireless LAN base station which is in the active state (*see col. 10, lines 34-39, stores information collected by the monitoring control apparatus, and transfers information to and from a maintenance operator*),

wherein when the first wireless LAN base station which is in the active state detects changed setting, the first wireless LAN base station is configured to send changed setting data to the management server and the management server is configured to store the changed setting data in the setting storing section(*see col. 10, lines 34-39, stores information collected by the monitoring control apparatus, and transfers information to and from a maintenance operator*),

wherein when the first wireless LAN base station detects a fault, the first wireless LAN base station is configured to send a fault detection notice to the management server and the management server is configured to send an activation request to the second wireless LAN base station which is in the standby state(*see figure 3, section 31, OMCR(Operation and Maintenance Center Radio), see col. 9, lines 31-41, remotely collect state information of each base station, and exchange the monitoring information*),

wherein when the management server confirms that the second wireless LAN base station has been placed in the active state, the management server is configured to send the changed setting data stored in the setting storing section to the second wireless LAN base station (*see col. 11-12, lines 59-4, the control information notified from the first BSC to the second BSC, the second BSC continues the job of the first BSC, then notifies the end to the first BSC*), and

wherein when the management server confirms that the setting of the second wireless LAN base station is the same as the setting of the first wireless LAN base station(*see col. 11-12, lines 59-4, the control information notified from the first BSC to the second BSC, the second BSC continues the job of the first BSC, then notifies the end to the first BSC*), the

management server is configured to send a standby request to the first wireless LAN base station and the first wireless LAN base station is configured to be placed in the standby state (*see col. 10, lines 14-19, control execution manager has the function to control the part of the BSC and carried out the instruction of the OMCR (active or standby state)*)

However Shirota fails to specifically disclose that a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides as claimed.

Bishop et al teaches a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides (see figure 5, section 122, see col. 4 lines 15-3, and lines 33-35, FIG. 5 illustrates a hardware configuration of a detection circuit suitable for indicating a failure of either an entire base station or an RCU inside a base station)

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have the fault detecting section within the base station because it would be more cost effective as an engineering design choice.

Regarding **Claim 6** Shirota discloses everything as applied above (*see claim 3*). In addition the duplex system includes:

wherein the duplex control section of the first wireless LAN base station which is in the standby state, or the management server is configured to periodically confirm whether the wireless LAN base station which is in the active state is alive (*see col. 11-12, lines 66-5, the first BSC continues to receive downloaded data, then the first BSC is notified when the downloading has ended, all BSC in the system receive state information of each BSC*), and

wherein when the duplex control section confirms that the wireless LAN base station which is in the active state has not been alive a predetermined number of times(**when a failure occurs**), the duplex control section is configured to place in the active state the second wireless LAN base station which is in the standby state (*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up BSC(OMCR)*)

Regarding **Claim 7** Shirota discloses everything as applied above (*see claim 4*). In addition the duplex system includes:

wherein the duplex control section of the first wireless LAN base station which is in the standby state, or the management server is configured to periodically confirm whether the wireless LAN base station which is in the active state is alive (*see col. 9 lines 47-50, the BSCs manage the state thereof and the state of each base station transceiver which serves there under*), and

wherein when the duplex control section confirms that the wireless LAN base station which is in the active state has not been alive a predetermined number of times(**when a failure occurs**), the duplex control section is configured to place in the active state the second wireless LAN base station which is in the standby state(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up BSC(OMCR)*).

Regarding **Claim 8** Shirota discloses everything as applied above (*see claim 5*). In addition the duplex system includes:

wherein the duplex control section of the first wireless LAN base station which is in the standby state, or the management server is configured to periodically confirm whether the wireless LAN base station which is in the active state is alive(*see col. 9 lines 47-50, the BSCs manage the state thereof and the state of each base station transceiver which serves there under*), and

wherein when the duplex control section confirms that the wireless LAN base station which is in the active state has not been alive a predetermined number of times, the duplex control section is configured to place in the active state the second wireless LAN base station which is in the standby state(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up BSC(OMCR)*).

Regarding **Claim 9** Shirota disclose a duplex system having a wireless LAN base station which is in an active state and a management server (*section.31, OMCR*)(*see Figure 3, section 32(1)-32(n), base station controllers, see col. 9, lines 25-30*),

wherein the wireless LAN base station comprises:

a fault detecting section for detecting a fault of the local wireless LAN base station in which it resides and generating a fault detection signal (*see col. 9, lines 48-50, each BSC manages the state thereof and the state of each Base station transceiver*);

a duplex control section for storing an address of the management server (*see col.9, lines 39-44, TCP connection established and each station has a individual IP address*), sending and

receiving a control signal to and from the management server, and controlling each of sections according to the control signal (*see col. 9, lines 48-53, each BSC manage the state thereof and the state of each base station transceiver, the BSC has the function of notifying such state information to the OMCR*);

a power control section for placing the local wireless LAN base station in an active state or a standby state according to a command received from the duplex control section *see col. 10, lines 14-19, control execution manager has the function to control the part of the BSC and carried out the instruction of the OMCR (active or standby state) control instructions reads on command, and managing control states of the BSC, with control instructions*); and

a setting control section (*see figure 3, section 53, monitoring control processor*) for storing setting of the local wireless LAN base station and sending and receiving the setting according to a command received from the duplex control section (*see col. 10, lines 34-39, stores information collected by the monitoring control apparatus, and transfers information to and from a maintenance operator*),

wherein the management server is configured to have stored a mail address(IP address) of a manager who receives a fault (*see col. 9 lines 37-46, monitoring information is exchanged using TCP/IP protocol, each LAN has a individual IP address, to communicate destination*), and

wherein when the management server(OMCR) receives the fault detection notice, the management server is configured to send a fault detection notice to the mail address of the

manager(see col. 9 lines 47-54, notification of state information is sent to the OMCR independently or by request of the OMCR)

However Shirota fails to specifically disclose that a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides as claimed.

Bishop et al teaches a fault detecting section for detecting a fault of a local wireless LAN base station in which it resides (see figure 5, section 122, see col. 4 lines 15-3, and lines 33-35, FIG. 5 illustrates a hardware configuration of a detection circuit suitable for indicating a failure of either an entire base station or an RCU inside a base station)

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have the fault detecting section within the base station because it would be more cost effective as an engineering design choice.

Regarding Claim 10 Shirota discloses everything as applied above (see claim 1). In addition the duplex system includes:

wherein the fault detecting section has a fault predicting function(exchange monitoring information)(see figure 3, section 31, OMCR(Operation and Maintenance Center Radio), see col. 9, lines 31-41, remotely collect state information of each base station, and exchange the monitoring information)) , and

wherein when the fault detecting section predicts a fault (fault is detected after up to twenty-two packets are transmitted, see col. 11, lines 30-31) , the duplex control section is configured to send a fault prediction notice to the management server or the wireless LAN base

station which is in the standby state, and the management server or the wireless LAN base station which is in the active state is configured to perform an activating process for the wireless LAN base station which is in the standby state (*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*).

Regarding **Claim 11** Shirota discloses everything as applied above (*see claim 2*). In addition the duplex system includes:

wherein the fault detecting section has a fault predicting function(*exchange monitoring information*)(*see figure 3, section 31, OMCR(Operation and Maintenance Center Radio), see col. 9, lines 31-41, remotely collect state information of each base station, and exchange the monitoring information*)), and

wherein when the fault detecting section predicts a fault (*fault is detected after up to twenty-two packets are transmitted, see col. 11, lines 30-31*), the duplex control section is configured to send a fault prediction notice to the management server or the wireless LAN base station which is in the standby state, and the management server or the wireless LAN base station which is in the active state is configured to perform an activating process for the wireless LAN base station which is in the standby state(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*).

Regarding **Claim 12** Shirota discloses everything as applied above (*see claim 3*). In addition the duplex system includes:

wherein the fault detecting section has a fault predicting function(*exchange monitoring information*)(*see figure 3, section 31, OMCR(Operation and Maintenance Center Radio), see col. 9, lines 31-41, remotely collect state information of each base station, and exchange the monitoring information*)), and

wherein when the fault detecting section predicts a fault(*fault is detected after up to twenty-two packets are transmitted, see col. 11, lines 30-31*), the duplex control section is configured to send a fault prediction notice to the management server or the wireless LAN base station which is in the standby state, and the management server or the wireless LAN base station which is in the active state is configured to perform an activating process for the wireless LAN base station which is in the standby state(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*).

Regarding **Claim 13** Shirota discloses everything as applied above (*see claim 4*). In addition the duplex system includes:

wherein the fault detecting section has a fault predicting function(*exchange monitoring information*)(*see figure 3, section 31, OMCR(Operation and Maintenance Center Radio), see col. 9, lines 31-41, remotely collect state information of each base station, and exchange the monitoring information*)), and

wherein when the fault detecting section predicts a fault(*fault is detected after up to twenty-two packets are transmitted, see col. 11, lines 30-31*) , the duplex control section is configured to send a fault prediction notice to the management server or the wireless LAN base

station which is in the standby state, and the management server or the wireless LAN base station which is in the active state is configured to perform an activating process for the wireless LAN base station which is in the standby state(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*).

Regarding **Claim 14** Shirota discloses everything as applied above (*see claim 5*). In addition the duplex system includes:

wherein the fault detecting section has a fault predicting function(*exchange monitoring information*)(*see figure 3, section 31, OMCR(Operation and Maintenance Center Radio), see col. 9, lines 31-41, remotely collect state information of each base station, and exchange the monitoring information*)), and

wherein when the fault detecting section predicts a fault(*fault is detected after up to twenty-two packets are transmitted, see col. 11, lines 30-31*), the duplex control section is configured to send a fault prediction notice to the management server or the wireless LAN base station which is in the standby state, and the management server or the wireless LAN base station which is in the active state is configured to perform an activating process for the wireless LAN base station which is in the standby state(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*).

Regarding **Claim 15** Shirota discloses everything as applied above (*see claim 9*). In addition the duplex system includes:

wherein the fault detecting section has a fault predicting function(*exchange monitoring information*)(*see figure 3, section 31, OMCR(Operation and Maintenance Center Radio), see col. 9, lines 31-41, remotely collect state information of each base station, and exchange the monitoring information*)), and

wherein when the fault detecting section predicts a fault(*fault is detected after up to twenty-two packets are transmitted, see col. 11, lines 30-31*), the duplex control section is configured to send a fault prediction notice to the management server or the wireless LAN base station which is in the standby state, and the management server or the wireless LAN base station which is in the active state is configured to perform an activating process for the wireless LAN base station which is in the standby state(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*).

Regarding **Claim 16** Shirota discloses everything as applied above (*see claim 10*). In addition the duplex system includes:

wherein the wireless LAN base station which is in the active state has a communication monitoring section for monitoring a communication state of the local wireless LAN base station (*see col. 9, lines 48-50, each BSC manage the state thereof and the state of each base station transceiver*), and

wherein when the local wireless LAN base station predicts a fault(*fault is detected after up to twenty-two packets are transmitted, see col. 11, lines 30-31*), the communication monitoring section is configured to confirm that there is no communicating wireless LAN client

(failure is generated and sent to the first OMCR) and then the duplex control section performs a switching process for switching the wireless LAN base stations(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*).

Regarding **Claim 17** Shirota discloses everything as applied above (*see claim 11*). In addition the duplex system includes:

wherein the wireless LAN base station which is in the active state has a communication monitoring section for monitoring a communication state of the local wireless LAN base station(*see col. 9, lines 48-50, each BSC manage the state thereof and the state of each base station transceiver*), and

wherein when the local wireless LAN base station predicts a fault(*fault is detected after up to twenty-two packets are transmitted, see col. 11, lines 30-31*), the communication monitoring section is configured to confirm that there is no communicating wireless LAN client **(failure is generated and sent to the first OMCR)** and then the duplex control section performs a switching process for switching the wireless LAN base stations(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*).

Regarding **Claim 18** Shirota discloses everything as applied above (*see claim 12*). In addition the duplex system includes:

wherein the wireless LAN base station which is in the active state has a communication monitoring section for monitoring a communication state of the local wireless LAN base station(*see col. 9, lines 48-50, each BSC manage the state thereof and the state of each base station transceiver*), and

wherein when the local wireless LAN base station predicts a fault(*fault is detected after up to twenty-two packets are transmitted, see col. 11, lines 30-31*), the communication monitoring section is configured to confirm that there is no communicating wireless LAN client (**failure is generated and sent to the first OMCR**) and then the duplex control section performs a switching process for switching the wireless LAN base stations(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*).

Regarding **Claim 19** Shirota discloses everything as applied above (*see claim 13*). In addition the duplex system includes:

wherein the wireless LAN base station which is in the active state has a communication monitoring section for monitoring a communication state of the local wireless LAN base station(*see col. 9, lines 48-50, each BSC manage the state thereof and the state of each base station transceiver*), and

wherein when the local wireless LAN base station predicts a fault(*fault is detected after up to twenty-two packets are transmitted, see col. 11, lines 30-31*), the communication monitoring section is configured to confirm that there is no communicating wireless LAN client (**failure is generated and sent to the first OMCR**) and then the duplex control section performs

a switching process for switching the wireless LAN base stations(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*).

Regarding **Claim 20** Shirota discloses everything as applied above (*see claim 14*). In addition the duplex system includes:

wherein the wireless LAN base station which is in the active state has a communication monitoring section for monitoring a communication state of the local wireless LAN base station(*see col. 9, lines 48-50, each BSC manage the state thereof and the state of each base station transceiver*), and

wherein when the local wireless LAN base station predicts a fault(*fault is detected after up to twenty –two packets are transmitted, see col. 11, lines 30-31*), the communication monitoring section is configured to confirm that there is no communicating wireless LAN client (**failure is generated and sent to the first OMCR**) and then the duplex control section performs a switching process for switching the wireless LAN base stations(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*).

Regarding **Claim 21** Shirota discloses everything as applied above (*see claim 15*). In addition the duplex system includes:

wherein the wireless LAN base station which is in the active state has a communication monitoring section for monitoring a communication state of the local wireless LAN base

station(*see col. 9, lines 48-50, each BSC manage the state thereof and the state of each base station transceiver*), and

wherein when the local wireless LAN base station predicts a fault(*fault is detected after up to twenty –two packets are transmitted, see col. 11, lines 30-31*), the communication monitoring section is configured to confirm that there is no communicating wireless LAN client (*failure is generated and sent to the first OMCR*) and then the duplex control section performs a switching process for switching the wireless LAN base stations(*see col. 11, lines 30-39, failure is detected by the first OMCR, the BSCs detect the disconnection, then the BSCs switch connection from IP address of the first OMCR to the second back up OMCR*).

Response to Arguments

3. Applicant's arguments with respect to **claims 1-5 and 9** have been considered but are moot in view of the new ground(s) of rejection.

In the remarks on pg. 14 of the amendment, the applicant contends that Shirota does not teach or suggest “a power control section or placing the local wireless LAN base station in an active state or a standby state according to a command received from the duplex control section”

Examiner respectfully disagrees Shirota teaches in col. 10 lines 14-19, the control executive manager controls the states of the BSC based on a control instruction from the OMCR which reads on command.

In the remarks on pg. 14 of the amendment, the applicant contends that Shirota does not teach or suggest “a fault detecting section for detecting a fault of the local wireless LAN base station *in which it resides* and generating a fault detection signal”

However rejection of claims is moot due to added limitations "in which it resides" See rejection of independent claims 1-5 and 9.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mon Cheri S. Davenport whose telephone number is 571-270-1803. The examiner can normally be reached on Monday - Friday 8:00 a.m. - 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/687,621
Art Unit: 2616

Page 31

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MD/md
January 16, 2008



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